

In the claims:

Please cancel claims 6, 16-19.

Please add claims 20-30.

1. (Previously Amended) A DC motor comprising:
  - a plurality of windings;
  - at least one microelectronic mechanical system (MEMS) relay positioned in the motor to activate in the presence of a magnetic field, where each relay includes:
    - a first substrate formed from a nonconductive or semiconductive material;
    - a magnetic actuation plate micro-machined on said first substrate, said magnetic actuation plate having a first conductive surface, said magnetic actuation plate comprising one or more anchors in direct contact with the first substrate, where said magnetic actuation plate and said one or more anchors are formed of permalloy material; and
    - a second substrate provided adjacent to said magnetic actuation plate, said second substrate having a nonconductive surface and a second conductive surface,
    - where said first and second conductive surfaces define at least two switching states, including an open state in which the conductive surfaces are physically separated from each other, and a closed state in which the conductive surfaces physically contact each other,
    - where said magnetic actuation plate, in the presence of a magnetic field, creates an actuation force that causes the electrically conductive surfaces to switch from one of the switching states to another of the switching states, and
    - where each relay is connected electrically to at least one corresponding winding and to power; and

a magnetic rotor having at least one pole positioned to induce a magnetic field in each MEMS relay when passing by the relay.

2. (Original) The motor of claim 1, wherein the windings are arranged in pairs of primary and secondary windings and each relay connects to a corresponding one of the pairs of windings.

3. (Original) The motor of claim 2, wherein the secondary windings all connect to a common node and each of the primary windings connects to the corresponding relay.

4. (Original) The motor of claim 1, wherein the motor is a four-pole, three-phase motor.

5. (Original) The motor of claim 4, wherein the motor includes three relays separated from each other by approximately 120°.

6. - 19. (Cancelled)

20. (New) The motor of claim 1, wherein the relay is magnetically switched between the first and the second switching states without an electrical biasing current or voltage.

21. (New) A DC motor comprising:

a plurality of windings;

a plurality of micromachined mechanical system (MEMS) switches each electrically connected to one part of said windings, wherein each switch is magnetically switched by a magnetic field without an electrical biasing current or

biasing voltage to turn electrical power on or off in at least one of the windings; and

a rotating magnetic rotor having at least one pole to direct the magnetic field in at least one of the switches when passing by the switch.

22. (New) The motor as in claim 21, wherein said switch is a micromachined magnetostatic switch.

23. (New) The motor as in claim 21, wherein the number of switches corresponds to the number of motor phases.

24. (New) The motor as in claim 22, wherein said switch is a relay.

25. (New) The motor as in claim 24, wherein the relay includes:

a first and second conductive surface to define at least two switching states, including an open state in which the conductive surfaces are physically separated from each other, and a closed state in which the conductive surfaces physically contact each other to permit a current flow between the two conductive surfaces.

26. (New) A DC motor comprising:

a plurality of windings;

a micromachined mechanical system (MEMS) relay electrically connected to one part of said windings for a motor phase, wherein the relay is actuated in response to a magnetic field and operates without biasing current or biasing voltage; and

a rotating magnetic rotor having at least one pole positioned to direct the magnetic field in the relay when passing by the relay.

27. (New) The motor as in claim 26, wherein the number of switches corresponds to the number of motor phases.

28. (New) The motor as in claim 26, wherein the relay includes:

a first and second conductive surface to define at least two switching states, including an open state in which the conductive surfaces are physically separated from each other, and a closed state in which the conductive surfaces physically contact each other to permit a current flow between the two conductive surfaces.

29. (New) The motor as in claim 28, wherein the relay actuates in a magnetic field and closes to conduct current through a circuit, wherein each circuit includes:

a power source, the windings, the relay, and a ground terminal.

30. (New) The motor as in claim 28, wherein the relay opens when the magnetic field is removed from the relay to terminate current conduction through a circuit, wherein each circuit includes:

a power source, the windings, the relay, and a ground terminal.